

WHAT IS CLAIMED IS:

1. A door assembly comprising a barrier door rotatable about an axis of rotation and an environmental door rotatable about the axis of rotation of the barrier door, the barrier door and the environmental door being selectively rotatable independently of one another, the barrier door and the environmental door further including an interlocking means for releasably interlocking the barrier door and the environmental door together so that the barrier door and the environmental door can be rotated in unison about the axis of rotation of the barrier door, the environmental door having a handle access hole passing therethrough and the barrier door having a handle passing through the handle access hole when the barrier door and the environmental door are latched together so that the barrier door and the environmental door can be opened in unison by the handle when the barrier door and the environmental door are latched together.

2. The door assembly of claim 1, wherein the environmental door further includes a cover for selectively closing the handle access hole, so that the handle access hole can be closed to provide an environmental barrier when the barrier door and the environmental door are in different rotational positions.

3. The door assembly of claim 2, further comprising an actuator for manually moving the cover between opened and closed positions relative to the handle access hole.

4. The door assembly of claim 3, wherein the cover is aligned for vertical movement in the environmental door with the closed position being gravitationally above the opened position so that the cover is gravitationally biased towards the opened position.

5. The door assembly of claim 4, wherein the cover further includes holding means for releasably holding the cover in the closed position and against gravitational forces urging the cover towards the opened position.

6. The door assembly of claim 5, wherein the holding means for releasably holding the cover in the closed position is configured such that engagement of the cover by the handle releases the holding means and permits the cover to be moved gravitationally to the opened position.

7. The door assembly of claim 1, further comprising an environmental door lock on the environmental door and movable between an unlocked position where the environmental door can be opened relative to a door frame and a locking position where the environmental door is releasably locked to the door frame, the environmental door lock being configured to prevent interlocking of the environmental door and the barrier door when the environmental door lock is in the locking position.

8. The door assembly of claim 7, wherein the interlocking means for releasably interlocking the barrier door and the environmental door includes an interlocking opening formed in the environmental door and an interlocking latch movably mounted in the barrier door, the interlocking latch being disposed and configured for entering into the interlocking opening in the environmental door for releasably engaging the environmental door, the environmental door lock being configured for covering the interlocking opening in the environmental door when the environmental door lock is in the locking position.

9. The door assembly of claim 1, further comprising a plurality of barrier door hinges, each said barrier door hinge having a barrier door hinge plate and a first frame hinge plate hingedly rotatable about a barrier door hinge pin, the environmental door having a plurality of environmental door hinges, each of said environmental door hinges having an environmental door hinge plate and a second frame hinge plate hingedly connected to one another about an environmental door hinge pin.

10. The door assembly of claim 9, wherein each of said barrier door hinges is substantially adjacent to one of said environmental door hinges, and wherein each of said barrier door hinge pins is unitary with one of said environmental door hinge pins.

11. The door assembly of claim 10, wherein each said of first frame hinge plates is formed unitarily with one of said second frame hinge plates.

12. The door assembly of claim 1, further comprising a frame hingedly connected to both the barrier door and the environmental door.

13. A door assembly comprising:

a frame having a plurality of frame hinge plates mounted thereon and defining a single axis of rotation;

a barrier door having a plurality of barrier door hinge plates hingedly engaged with the frame hinge plates for rotation about the axis of rotation between a closed position relative to the frame and open positions relative to the frame;

an environmental door having environmental door hinge plates hingedly connected to the frame hinge plates for rotation about the axis of rotation independently of the rotation the barrier door about the axis of rotation, the environmental door having environmental door lock movable between an unlock position where the environmental door can be opened relative to the frame and a locking position where the environmental door is releasably locked to the frame; and

an interlocking means for releasably interlocking the barrier door and the environmental door together for rotation about the axis of rotation in unison, the environmental door lock and the interlocking means being configured for preventing interlocking of the barrier door and the environmental door when the environmental lock is in the locking position.

14. The door assembly of claim 13, wherein the barrier door further includes a barrier door lock for releasably locking the barrier door to the frame when the barrier door both is in the closed position relative to the frame.

15. The door assembly of claim 14, wherein the barrier door further includes a handle, the environmental door includes a handle hole for receiving the handle of the barrier door.

16. The door assembly of claim 15, wherein the environmental door further includes a cover for releasably covering the handle hole in the environmental door.

17. The door assembly of claim 16, wherein the environmental door includes holding means for releasably holding the cover in a position for closing the handle hole and biasing means for biasing the cover away from the handle hole when the holding means for the cover is released.